

## Abstract

In a picture processing apparatus for receiving an input picture signal and generating an output picture signal with higher quality than the input picture signal. A first signal processing means and a second signal processing means are disposed. The first signal processing means performs a storage type process. The first signal processing means has a storing means for storing a picture signal with the same quality as the output picture signal. The first signal processing means adds the input picture signal and the picture signal stored in the storing means so as to generate a first picture signal with higher quality than the input picture and store the first picture signal to the storing means. The second signal processing means performs a class categorizing adaptive process. The second signal processing means extracts a feature of the input picture signal corresponding to the position of a considered pixel of the output picture signal, categorizes the considered pixel as one of a plurality of classes corresponding to the feature, and calculates the input picture signal using a predetermined calculating method corresponding to the categorized class so as to generate a second picture signal with higher quality than the input picture signal. In addition, the picture processing apparatus has an output selecting means that performs a

determination for the first picture signal and the second picture signal and selects one of the first picture signal and the second picture signal as the output picture signal.